

# Notice of Allowability

Application No.

10/646,662

Applicant(s)

NOESSING ET AL.

Examiner

Daniel Swerdlow

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2646

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 25 July 2005.
2. ☒ The allowed claim(s) is/are 1,4 and 11.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☒ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying Indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Richard E. Jenkins, reg. no. 28,428 on 4 October 2005.

The application has been amended as follows:

In the specification:

On page 6: The paragraph beginning on line 23 is amended as follows:

This object is achieved by a method for adjusting a ringing signal current in a subscriber line as ~~claimed in claim 1 and by a circuit arrangement as claimed in claim 5~~ described herein.

On page 7:

Delete the paragraph beginning on line 18:

~~The subclaims contain advantageous developments and improvements of the circuit device specified in claim 5.~~

On page 8:

Delete the paragraph beginning on line 13:

~~The subclaims contain advantageous developments and improvements of the circuit device specified in claim 5.~~

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On page 9:

Insert the following new paragraph after the words "according to the present invention" appearing on line 32:

Figure 2 shows exemplary method steps according to the present invention.

On page 13:

Insert the following new paragraph after line 31:

-- Figure 2 is a flow chart illustrating an exemplary process for adjusting a ringing signal current in a subscriber line with a controlled ringing signal generator according to an embodiment of the subject matter described herein. The ringing signal generator can be coupled to the subscriber line and generate a ringing signal voltage. The ringing signal current can be dropped across the subscriber line and a load of a subscriber coupled to the subscriber line. Initially, a ringing signal current flowing through the subscriber line may be detected (step 200). Next, the detected ringing signal current can be compared with stored current values (step 202). Each stored current value is associated with a stored voltage value in dependence of the number of subscribers coupled to the subscriber line and the length of the subscriber line in such a manner that, by adjusting a ringing signal voltage to a respective stored voltage value, the corresponding ringing signal current is equal to a predetermined optimum current value. Further, the ringing signal voltage may be set to a corresponding voltage value associated with the stored current value if the detected ringing signal current is greater than the predetermined optimum current value (step 204). Detection of the ringing signal current and adjustment of the ringing signal voltage may be carried out periodically or once per ringing signal. --

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2. The following changes to the drawings have been approved by the examiner and agreed upon by applicant:

3. Applicant will add a new drawing figure to be designated Figure 2 depicting the method steps claimed including at least:

DETECT RINGING CURRENT IN SUBSCRIBER LINE

COMPARE DETECTED RINGING CURRENT WITH STORED CURRENT VALUES

IF DETECTED RINGING CURRENT IS GREATER THAN A PREDETERMINED  
OPTIMUM CURRENT: SET RINGING VOLTAGE TO VALUE ASSOCIATED WITH  
STORED CURRENT VALUE IN DEPENDENCE OF NUMBER OF SUBSCRIBERS ON  
SUBSCRIBER LINE AND LENGTH OF SUBSCRIBER LINE

4. In order to avoid abandonment of the application, applicant must make these above agreed upon drawing changes.

5. The following is an examiner's statement of reasons for allowance:

6. Regarding Claim 1, US Patent 6,813,340 to Issaa et al. discloses controlling ringing voltage on a telephone subscriber loop based on sensed loop current (column 2, lines 56-67). However, Issaa discloses selection of a voltage based on determination of a fault condition on the line. As such, Issaa fails to disclose association of stored current values with stored voltage

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values in dependence of the number of subscribers coupled to the subscriber line and the length of the subscriber line, as claimed. WO 02/073936 to Ericsson discloses a ringing current supply that compares the ringing current to a desired maximum value and attenuates the current if it exceeds that value (abstract). Ericsson discloses determination of the current values to prevent damage to central office components (page 2, fourth paragraph). As such, Ericsson fails to disclose association of stored current values with stored voltage values in dependence of the number of subscribers coupled to the subscriber line and the length of the subscriber line, as claimed. Because the prior art does not disclose or make obvious every element of the claimed invention, Claim 1 is allowable.

7. Claims 4 and 11 are allowable due to dependence from Claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Swerdlow whose telephone number is 571-272-7531. The examiner can normally be reached on Monday through Friday between 7:30 AM and 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh H. Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Daniel Swerdlow  
Examiner  
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ds  
4 October 2005